

The Water System

Since 1965, the City of Richardson has obtained its water supply through a contract with the North Texas Municipal Water District (NTMWD), a quasi-state agency created by the State legislature in 1954.

The NTMWD treats and distributes water from Lake Lavon impoundment reservoir, which was enlarged between 1967 and 1975, providing 250 percent increase in storage capacity. Additional water sources were gained when member cities decided to participate in the construction of the Chapman Lake Project, located in Hopkins and Delta Counties, to the east of Lake Lavon. This project increased the District's water supply by 46 percent. These water sources, in conjunction with the Lake Texoma and New Bonham Reservoir projects, will support the projected population of 2 million people in the participating areas through 2030. Richardson's water is delivered from Lave Lavon at two points within the city. The Eastside Pump Station receives water through Parallel 56-inch mains and the Northside Pump Station receives water through a 42-inch main.

The City's water system is presently divided into three pressure zones. The 825.0 Service Area extends north from Arapaho Road to the city limit line and west from Custer Parkway to Coit Road. The 767.5 Service Area covers the area south of Arapaho Road to the southern city limit line and from Central Expressway to Coit Road, as well as the entire city east of Central Expressway and west of Jupiter Road. The 700.0 Service Area covers the portion of the city between North Star and Murphy Roads.

The Sewer System

Due to its topography, the City of Richardson is divided into five separate draining basins for the purpose of sewer collection.

Cottonwood Creek

This drainage area covers approximately 4,100 acres, or 6.15 square miles. The sewage generated in the Cottonwood Creek drainage area flows through a metering station on Spring Valley Road approximately 400 feet east of Waterview Drive, then to the City of Dallas for treatment. This treatment service is provided through a contract originated in 1956. The present 20-year contract was signed on January 25, 1984. This drainage basin contains sewer lines ranging from 6 to 24 inches in size.

Floyd Branch

This drainage area covers approximately 2,500 acres, or 3.83 square miles. The sewage generated in the Floyd Branch basin flows into the City of Richardson Floyd Branch Plant for treatment. The North Texas Municipal Water District (NTMWD) through a contract with the City operates this plant. This facility utilizes the extended aeration process. Lines in the Floyd Branch drainage basin vary in size from 6 to 24 inches.

Duck Creek

This drainage area covers approximately 3,870 acres, or 6.05 square miles. The sewage generated in Duck Creek flows through a metering station at Belt Line and Jupiter Roads and on to the Duck Creek Treatment Plant in Garland. The Cities of Richardson and Garland jointly own this facility. The City of Garland is responsible for the plant operation. The City of Richardson pays for the treatment as stipulated in the contract, originally signed in 1960.

Rowlett Creek

The Rowlett Creek drainage area covers approximately 3,375 acres, or 5.06 square miles. At the present time, only limited development has taken place in this drainage basin and only small portions of the collection system have been installed. A master plan for sewer capacity is being developed on the basis of anticipated development in this area. The drainage basin will contain lines that vary in size from 6 to 16 inches. The wastewater generated here will flow to the NTMWD Regional Plant for treatment.

Spring Creek

This drainage area is approximately 4,850 acres, or 7.58 square miles. The Spring Creek Drainage basin flows to a lift station on the eastern edge of the city operated by NTMWD. The sewage is pumped north along Jupiter road to the NTMWD Sewage Treatment Plant in Plano.

<u>Supervisory Control and Data Acquisition (SCADA)</u>

It is necessary to provide the water in the proper quantity, at adequate pressures, when and where it is needed for domestic, commercial and industrial use, as well as for adequate fire protection. This service is necessary 24 hours per day, seven days a week, 365 days per year. This system utilizes a state-of-the-art Supervisory Control and Data Acquisition (SCADA) system to manage and control the water and wastewater systems from a central control room. This group also serves as a 24-hour citizen response center for all Public Services Department inquires and service requests.